



INSTRUCT-O-GRAM

THE HANDS-ON TRAINING GUIDE FOR THE FIRE INSTRUCTOR

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Instructor Methodology The Psychology of Learning

TASK

Being able to instruct effectively is vital to your department. The growth and development of the personnel who serve in your department is key to their enhanced performance. Instructors from company officers to training officers must recognize the importance of education and continued skills development. This *Instruct-O-Gram* is designed to enhance the knowledge and skills of the instructor. The instructor plays a key role in the development and enhancement of personnel as your department strives to provide quality and efficient service to its customers.

OBJECTIVES

1. The student will be able to describe learning processes.
2. The student will be able to describe learning domains.
3. The student will be able to describe learning styles.
4. The student will be able to describe ways to influence learning.
5. The student will be able to describe ways to motivate students.
6. The student will be able to describe factors that effect learning.

INSTRUCTIONAL AIDS

1. Videotapes of good instructors in action
2. Audio /visual equipment as necessary for your delivery
3. IFSTA Text, Fire and Emergency Services Instructor, Sixth Edition (Recommended)

ESTIMATED TEACHING TIME

The time to deliver this program will vary in that each group of students will have different strengths and weaknesses. This is a program that does not need to be time-specific; however a recommended minimum is 6 hours in length. Spend as much time as necessary to facilitate the development of your students to the desired functional level.

MOTIVATING THE STUDENT

As you look back to your past you will be able to identify an instructor who stands out as being one who made a difference. What made this individual stand out? Why do you hold him or her in high regards? I would suggest that this instructor understood the psychology of learning. Why does that mean so much? Well, this individual understood the principles necessary to facilitate learning by the students. By recognizing these methods and principles he or she was able to utilize a variety of techniques to stimulate your ability to learn.

This quality is an admirable one that can make a difference in the quality of the next generation of emergency responders. As good instructors, we want to send students away from instruction with knowledge, skills and a positive attitude. As instructors, we hold the key to developing personnel. This development of personnel includes the next generation of instructors. The efforts, energy and attitude put forth by today's instructors will determine the capabilities of our future cadre of fire and emergency service instructors, and thus of our departments and agencies.

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PRESENTATION

A. Motivation

Motivating learners to achieve their best should be a priority of every instructor. This can be a significant challenge for the instructor. It is important to understand what motivates students and what desires cause them to perform beyond expected or to seek out excellence. Over the years many psychologists and researchers have studied what motivates people. This section is focused on some of the theories as they relate to learning.

1. Maslow's Hierarchy of Needs

We all have certain wants or needs that we strive to have met or satisfied that motivate us to take some sort of action to fulfill or eliminate these desires.

a. Physiological

Example: Pleasing classroom environment

b. Security

Example: Adequate knowledge base to belong in class

c. Social

Example: Being accepted by others determines classroom behavior

d. Self Esteem

Example: Recognized or praised by peers

e. Self-Actualization

Example: Performing beyond what is required

2. Herzberg's Theory

Herzberg proposed that the job characteristics that satisfied people were different from those that dissatisfied people. In his model he called these two components satisfiers and dissatisfiers.

a. Satisfiers (motivator factors) – those factors that stimulate action in individuals

- i. Achievement
- ii. Recognition
- iii. Work Itself
- iv. Responsibility
- v. Advancement

b. Dissatisfiers (hygiene factors) – those factors that affect the health and well-being of individuals

- i. Interpersonal relationships with learners, teachers, and supervisors
- ii. Quality of supervision
- iii. Working conditions
- iv. Personal life

3. Techniques to Motivate Adult Learners

If there is an obstacle that prevents a learner from attaining course goals, the learner's reaction is either to withdraw and give up or to fight and push

through. By utilizing various instructional techniques and utilizing learning activities such as hands on, instructors can motivate learners to move forward and overcome learning blocks.

a. Techniques for motivating adult learners

- i. Provide opportunities for learners to show their own creativity and to develop their own thinking skills.
 - ii. Promote working together in groups to share and learn other methods. Often-times this will allow slow learners to speed up the learning process through additional interaction on the subject in a variety of alternative methods.
 - iii. Share, receive and challenge positive comments and engage in meaningful debates.
 - iv. Demonstrate that classroom knowledge and skills can be applied to real-life situations. This can be accomplished through scenario-based recreations and critiques.
 - v. Utilize videos or provide demonstrations that have a meaningful relationship to the topic or job requirements.
- ##### b. Instructor attitudes and ideals aid learners.
- The following are some positive actions and ideals to utilize.
- i. Demonstrate enthusiasm.
 - ii. Set high expectations of learners.
 - iii. Require outstanding performance.
 - iv. Expect success.
 - v. Provide relevancy.
 - vi. Encourage achievement through realistic goals.

B. Learning Domains

There are three domains of learning: cognitive, psychomotor and affective.

1. Cognitive (knowledge)

Cognitive is the most commonly understood learning domain. Cognitive is a general concept that refers to all forms of knowing.

It is the foundation for the other two domains. Many instructors refer to this domain as lecture. The true concept of cognitive is the information or subject to be learned and is usually presented in a technical or factual presentation. Typically this is delivered through lecture and discussion. However, demonstration as the initial teaching tool can be used with respect to cognitive learning.

2. Psychomotor (skills)

Psychomotor is the most commonly used form of learning in the emergency services field. It is often-times referred to as hands-on learning or

training. The key to successful psychomotor learning or training is to provide demonstrations as the learners watch. During the demonstrations the learners are watching and developing a sense for performing the actions and mentally preparing themselves to take these actions. A key to successful psychomotor training is continued practice with positive reinforcement and direction. It is important to correct mistakes yet praise for accomplishments at the same time.

3. Affective (attitude)

This is the least understood domain. It is rarely taught as a separate subject but in conjunction with the cognitive domain. It is paramount that instructors foster the development of good attitudes among learners. The affective domain is often a learned concept. Learners and teachers alike can be guided and influenced through the following:

- a. Receiving – Shows willingness to pay attention.
- b. Responding – Shows concepts have been received and participate in their use at least on a trial basis.
- c. Valuing – Internalizes a set of values and beliefs that are worthwhile
- d. Organizing – Resolves conflicts between values and builds consistent values
- e. Characterizing – Adopts and personalizes concepts and values

C. Learning Styles

1. Convergers

These learners do best in learning when they have learning interaction where a specific problem has one correct answer or solution. These learners are motivated by the desire to find the relevancy of the situation.

2. Divergers

These learners like to organize their information and impressions into a meaningful whole. They also like to work with their ideas on an imaginative level. This group likes information presented in a detailed, specific, systematic and reasonable way.

3. Assimilators

These learners are good at integration. They like to bring together various observations or models used on the practical level. These learners are motivated to answer the question, "What is there to know?" These individuals like to respond to information provided by someone known to be an expert. They also like information to be delivered in an organized and accurate manner.

4. Accommodators

These learners are known as the "trial and error" group. They tend to rely on the judgment and impact of others and generally solve problems on that trial and error principle. They are motivated by the question "What would happen if I did this?"

D. Influencing Learning

1. Present the appropriate attitude.
2. Meet goals, objectives, job performance requirements, and standards.
3. Provide relevance.
4. Prepare for teaching.
5. Utilize appropriate learning domains.
6. Provide adequate opportunities for participation.
7. Bring experiences to the lesson.
8. Provide feedback and encouragement.
9. Provide appropriate periods of instruction.
10. Provide ample opportunity for practice and repetition.

E. Learner Characteristics

1. Life Experiences

Adult learners have a variety of experiences. Some may or may not have experiences that relate to the instructional programs you are delivering. It is important, as instructors, to be able to merge these individuals' experience with the new material being delivered. It is also crucial that they interact in a delivery process in which they can learn. In simple terms this involves delivery to students using techniques they can relate to. "X generation" learners are not accustomed to modern day fast and flashy PowerPoint presentations, whereas the "Z generation" may be bored if the delivery is not fast and flashy.

2. Motivation

Individual learners are taking classes for a variety of reasons. It is important for you, as an instructor, to show how the learning is immediately useful. Learners are focused on meeting specific needs of achievement, satisfaction and self-fulfillment. It is a paramount to focus on the students and deliver programs that relate to their life experiences and fulfill their needs.

3. Confidence

Many adult learners lack confidence since they have been out of the formal learning setting for several years. They lack the confidence that they have the abilities to be successful learners. Adult learners must feel confident that at the end of the class they have been successful and have

accomplished something. To boost this confidence it is imperative that instructors provide constant feedback and encouragement throughout the learning process.

4. Demographic Factors

- a. Age – Have you heard the statements that “I am too old to learn” or “You can’t teach an old dog new tricks”? It was once thought that the older you got the harder it was to learn. This theory has been proven false whereas it has been shown that the mind does not necessarily deteriorate with age. Older learners have been shown to continue their studying for longer and at more in-depth levels.
- b. Sex – Women are more likely to use their left brain (logical, analytical and sequential processes) whereas men are most likely to use their right side of the brain (intuitive, creative, and manipulative) for learning.
- c. Culture and Ethnicity – It is important to understand customs of the cultural or ethnic group. Maintain an open classroom to facilitate cooperative learning.
- d. Educational Background – Educational backgrounds influence individual attitudes, confidence and abilities to handle new learning experiences.

5. Variations in Learning Styles

F. Individual Student Profiles

1. Low Literacy levels
 - a. Use visual aids rather than long lectures.
 - b. Modify text selection to meet reading levels.
2. Learning Disabilities
 - a. Problems that affect learning
 - i. Memory
 - ii. Hearing or visual impairments
 - iii. Language barriers
 - iv. Reading comprehension and word recognition
 - v. Reasoning deficiencies
3. Disruptive Learners
 - a. Talkative

- b. Aggressive
- c. Center of attention
- d. Show off
- e. Challenging of everything

4. Nondisruptive Learners

- a. Uninterested learners
- b. Bored
- c. Shy /timid

G. Managing Individual Learners

1. Counseling
2. Coaching
3. Tutoring / Peer Assistance
4. Mentoring

RESOURCES

North Carolina Fire and Rescue Commission Instructor Methodology Curriculum, North Carolina Officer of State Fire Marshal

Great Oaks Institute of Technology Fire Instructor I Curriculum, Great Oaks Institute of

Technology, Cincinnati, Ohio

Fire and Emergency Services Instructor, Sixth edition, IFSTA, May 2000

Dimensions of Organizational Behavior, Theodore T. Herbert, Macmillan Publishing Company, New York, 1981

Company Officer, Clinton H. Smoke, Delmar Publishing, First edition, 1999

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The materials in this *Instruct-O-Gram* were developed by Douglas Cline, a 22-year veteran of the Fire Service and a Captain with the Chapel Hill (NC) Fire Department. Cline is a North Carolina Level II Fire Instructor, National Fire Academy Instructor for the Office of State Fire Marshal, an EMT-Paramedic Instructor/Coordinator for the North Carolina Office of Emergency Medical Services, Instructor in the Fire Science Program at Durham Technical Community College, and an Adjunct Instructor at Great Oaks Institute and Technology in the Public Safety Division. Cline currently serves as an ISFSI Eastern Regional Director.

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IOG Correction

The Iowa Rate of Flow Formula was incorrectly stated in the July/August 2003 IOG on *Initial Handline Deployment*. The correct formula is: length X width X height (cubic feet) divided by 100 equals GPM. We apologize for this error and encourage you to correct this information in your *Instruct-O-Gram* files.